IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appl.No.: 10/603,030   Confirmation No.: 2619
Appellant: Allred
Filed: 6/24/2003
TC/AU: 2193
Examiner: Malzahn, David

Docket: TI-35877
Cust.No.: 23494

APPEAL BRIEF

Commissioner for Patents
P.O.Box 1450
Alexandria VA   22313-1450

Sir:

The attached sheets contain the Rule 41.37 items of appellant's Appeal Brief pursuant to the Notice of Appeal filed 03/01/2007. The Director is hereby authorized to charge the fee for filing a brief in support of the appeal plus any other necessary fees to the deposit account of Texas Instruments Incorporated, account No. 20-0668.

Respectfully submitted,

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Rule 41.37(c)(1)(i) Real party of interest

Texas Instruments Incorporated owns the application.

Rule 41.37(c)(1)(ii) Related appeals and interferences

There are no related dispositive appeals or interferences.

Rule 41.37(c)(1)(iii) Status of claims

Pursuant to MPEP 1205.02, for each claim in the case appellant states the status as follows:

Claim 1: allowed

Claim 2: allowed

Claim 3: allowed

Claim 4: allowed

Claim 5: allowed

Claim 6: allowed

Claim 7: allowed

Claim 8: allowed

Claim 9: allowed

Claim 10: allowed

Claim 11: allowed

Claim 12: allowed

Claim 13: allowed

Claim 14: allowed

Claim 15: allowed

Claim 16: allowed

Claim 17: allowed

Claim 18: allowed

Claim 19: allowed

Claim 20: rejected

Claim 21: rejected

Claim 22: rejected

Claim 23: rejected

Claim 24: rejected

Claim 25: rejected

Claim 26: rejected

Claim 27: rejected

Pursuant to MPEP 1205.02, appellant identifies each claim on appeal as follows

Claim 20: on appeal

Claim 21: on appeal

Claim 22: on appeal

Claim 23: on appeal

Claim 24: on appeal

Claim 25: on appeal

Claim 26: on appeal

Claim 27: on appeal

Rule 41.37(c)(1)(iv) Status of amendments

There is no amendment after final rejection.

Rule 41.37(c)(1)(v) Summary of claimed subject matter

The independent claims on appeal consist of method claim 20.

The subject matter of claim 20 is a method of electronically converting a gain index signal representing a desired dB value for an audio signal, comprising:

receiving the gain index signal representing a desired dB value for an audio signal, wherein the desired dB value is selected from a set having an integer number S of dB values (application page 5, lines 3-5; FIG.1, GI);

an integer number V of linear gain values (application page 5, lines 5-6: FIG.1, TA, PLG); and

for producing a linear gain signal to apply to said audio signal in response to the gain index signal and to one of the V linear gain values (application page 5, lines 6-7; FIG.1, GI, LG); and

wherein V is less than S (application page 5, line 8).

<u>Rule 41.37(c)(1)(vi) Grounds of rejection to be reviewed on appeal</u>

The grounds of rejection to be reviewed on appeal are:

1. Claims 20-27 were rejected under 35 USC § 101 as being directed to non-statutory subject matter.

<u>Rule 41.37(c)(1)(vii) Arguments</u>

1. Claims 20-27 were rejected as directed to non-statutory subject matter.

<u>Claims 20-27</u>: The Examiner cited a lack of a useful, tangible, and concrete result because the claims only compute a linear gain for an audio signal from a dB gain for the audio signal which appears not to be a "tangible" nor "concrete" result. However, current MPEP § 2106 IV. C. 2. (2) b)-c) consider "tangible result" and "concrete result" and conclude as follows.

> The tangible requirement does not necessarily mean that a claim must either be tied to a particular machine or apparatus or must operate to change articles or materials to a different state or thing. However, the tangible requirement does require that the claim must recite more than a 35 U.S.C. 101 judicial exception, in that the process claim must set forth a practical application of that judicial exception to produce a real-world result. .... In other words, the opposite meaning of "tangible" is "abstract".

and

> Another consideration is whether the invention produces a "concrete" result. Usually, this question arises when a result cannot be assured. In other words, the process must have a result that can be substantially repeatable or the process must substantially produce the same result again. ... The opposite of "concrete" is unrepeatable or unpredictable. ...

Base claim 20 computes an audio signal linear gain which implies a repeatable (i.e., "concrete") result and which would be a real-world result for the audio signal (i.e., "tangible").

Consequently, the claims 20-27 are directed to statutory subject matter.

Rule 41.37(c)(1)(viii) Claims appendix

Claim 20: A method of electronically converting a gain index signal representing a desired dB value for an audio signal, comprising:

receiving the gain index signal representing a desired dB value for an audio signal, wherein the desired dB value is selected from a set having an integer number S of dB values;

an integer number V of linear gain values; and

for producing a linear gain signal to apply to said audio signal in response to the gain index signal and to one of the V linear gain values; and

wherein V is less than S.

Claim 21: The method of claim 20 wherein each linear gain value in the integer number V of linear gain values corresponds to a respective dB value in a subset of the set.

Claim 22: The method of claim 21 wherein each linear gain value in the integer number V of linear gain values equals ten raised to a power of a respective dB value in the set divided by 20.

Claim 23: The method of claim 20 wherein one linear gain value in the integer number V of linear gain values corresponds to a largest dB value in the set.

Claim 24: The method of claim 20:

wherein a uniform granularity GR exists between each successively larger dB value in the set; and

wherein $V=6/GR$.

Claim 25: The method of claim 20 wherein the step of producing the linear gain signal comprises:

selecting one linear gain value of the integer number V of linear gain values in response to the linear gain signal, wherein the selected linear gain corresponds to a given dB value in the set; and

multiplying the selected one linear gain value times two raised to a power equal to an integer N, wherein the desired dB value is approximately the integer N times 6 apart from the given dB value.

Claim 26: The method of claim 25 wherein each linear gain value in the integer number V of linear gain values equals ten raised to a power of a respective dB value in the set divided by 20.

Claim 27: The method of claim 25:

wherein the selected one linear gain value comprises a binary number; and

wherein the step of multiplying comprises shifting the binary number the integer N times.

Rule 41.37(c)(1)(ix) Evidence appendix

Rule 41.37(c)(1)(x) Related proceedings appendix